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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,492	01/07/2002	Adriana Silva Hemerly	217943US0X CONT	3581

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
COLLINS, CYNTHIA E	

ART UNIT	PAPER NUMBER
1638	11

DATE MAILED: 10/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	10/036,492	HEMERLY ET AL.	
	Examiner	Art Unit	
	Cynthia Collins	1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-28 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) 1-28 are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-4 and 7, drawn to an at least partially purified protein or a peptide, classified in class 530, subclass 370, for example.

II. Claims 5-6, drawn to a mutein, classified in class 530, subclass 370, for example.

III. Claims 8-9, drawn to an antibody specifically recognizing a protein or a peptide, classified in class 530, subclass 387.1, for example.

IV. Claims 8-9, drawn to an antibody specifically recognizing a mutein, classified in class 530, subclass 387.1, for example.

V. Claims 10-13, drawn to a non-genomic DNA sequence encoding a protein or a peptide, classified in class 536, 23.6, for example.

VI. Claim 10, drawn to a non-genomic DNA sequence encoding a mutein, classified in class 536, 23.6, for example.

VII. Claims 14-15, 17-21 and 23-28, drawn to a vector comprising a DNA sequence encoding a protein or a peptide, to methods of transforming plant cells, and to plant cells, plants and plant material, classified in class 435, subclass 468, for example.

VIII. Claims 14-21 and 23-28, drawn to a vector comprising a DNA sequence encoding a mutein, to methods of transforming plant cells, and to plant cells, plants and plant material, classified in class 800, subclass 298, for example.

IX. Claim 22, drawn to a method for identifying or obtaining proteins, classified in class 435, subclass 4, for example.

For inventions I, III and VII above, restriction to one of inventions (A)-(G) is also required under 35 USC 121. Therefore, if invention I, III or VII is elected, one of inventions (A)-(G) must also be elected.

For inventions II, IV, VI and VIII above, restriction to one of inventions (A)-(D) is also required under 35 USC 121. Therefore, if invention II, IV, VI or VIII is elected, one of inventions (A)-(D) must also be elected.

For invention V above, restriction to one of the following seven inventions is also required under 35 USC 121: (A); (B); (C); (D); (E) and (H); (F) and (I); (G) and (J). Therefore, if invention V is elected, one of the following seven inventions must also be elected: (A); (B); (C); (D); (E) and (H); (F) and (I); (G) and (J).

(A)	SEQ ID NO:6	(F)	SEQ ID NO:11
(B)	SEQ ID NO:7	(G)	SEQ ID NO:13
(C)	SEQ ID NO:10	(H)	SEQ ID NO:9
(D)	SEQ ID NO:12	(I)	SEQ ID NO:14
(E)	SEQ ID NO:5	(J)	SEQ ID NO:15

Applicants are reminded that different nucleotide and amino acid sequences are structurally distinct chemical compounds and are unrelated to one another. These sequences are

thus deemed to normally constitute **independent and distinct** inventions within the meaning of 35 U.S.C. 121. Absent evidence to the contrary, each such nucleotide or amino acid sequence is presumed to represent an independent and distinct invention, subject to a restriction requirement pursuant to 35 U.S.C. 121 and 37 CFR 1.141 et seq. This requirement is not to be construed as a requirement for an election of species, since each nucleotide and amino acid sequence is not a member of a single genus of invention, but constitutes an independent and patentably distinct invention.

The inventions are distinct, each from the other because of the following reasons:

Inventions (A)-(J) are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions represent structurally different polynucleotides and structurally different polypeptides. Where structural identity is required, such as for expression or hybridization, the different sequences have different effects.

Inventions I-VIII are unrelated products, and the method of invention IX is unrelated to the products of inventions I-VIII. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different modes of operation, different functions, and different effects.

The protein or peptide of invention I is structurally and functionally distinct from the mutein of invention II, the antibodies of invention III-IV, the DNA sequence of inventions V-VI, and the DNA vector of inventions VII-VIII, and thus each type of product can be used

separately in different methods. The protein or peptide of invention I, the mutein of invention II, and the antibodies of inventions III-IV are an amino acid polymers, whereas the DNA sequences and vectors of inventions V-VIII are nucleotide polymers. The protein or peptide of invention I has a different amino acid sequence than the mutein of invention II and the antibodies of inventions III-IV. The protein or peptide of invention I has a replicative function, whereas the mutein of invention II lacks a replicative function. The antibodies of invention III function by specifically binding to protein or peptide that has a replicative function, whereas the antibodies of invention IV function by specifically binding to protein or peptide that lacks a replicative function. The DNA vector of inventions VII-VIII contains nucleotides in addition to those contained by the DNA sequence of Inventions V-VI. The DNA sequence of inventions V-VI functions by encoding a protein, peptide or mutein, whereas the DNA vector of inventions VII-VIII functions by replicating the DNA sequence encoding a protein, peptide or mutein or by expressing in a plant cell the DNA sequence encoding a protein, peptide or mutein. The method of invention IX is unrelated to the products of inventions I-VIII because the method of invention IX does not require the use of any of the products of inventions I-VIII, or result in the production of any of the products of inventions I-VIII.

Inventions V-VI and VII-VIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the non-genomic DNA sequence of inventions V-VI can be used in a materially different process of using that product, such as a hybridization method.

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Process claims that depend from or otherwise include all the limitations of the patentable product** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai, In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.**

Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, their recognized divergent subject matter, and the requirement for different areas of search, restriction for examination purposes as indicated is proper.

A telephone call was made to Tom Cunningham on July 2, 2003 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Remarks

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Collins whose telephone number is (703) 605-1210. The examiner can normally be reached on Monday-Friday 8:45 AM -5:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on (703) 306-3218. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-4242 for regular communications and (703) 308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

CC
October 7, 2003

ASHWIN D. MEHTA, PH.D
PATENT EXAMINER